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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/828,960	04/20/2004	Kazuyoshi Shioiri	KOY-37	5404	
20311 75	90 11/03/2006		EXAM	EXAMINER	
LUCAS & MERCANTI, LLP			THOMAS, JAISON P		
475 PARK AVI 15TH FLOOR	ENUE SOUTH		ART UNIT	PAPER NUMBER	
NEW YORK, 1	NY 10016		1751		
			DATE MAILED: 11/03/200	DATE MAILED: 11/03/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/828,960	SHIOIRI ET AL.
Office Action Summary	Examiner	Art Unit
	Jaison P. Thomas	1751
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the o	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING E  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 20 A	April 2004.	
	s action is non-final.	
3) Since this application is in condition for allows closed in accordance with the practice under		
Disposition of Claims		
<ul> <li>4) ☐ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) 6-18 is/are withdraw</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-5 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/a</li> </ul>	n from consideration.	
Application Papers		
9) The specification is objected to by the Examin		
10)⊠ The drawing(s) filed on 10 April 2004 is/are: a		- <del>-</del>
Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	***	
11) The oath or declaration is objected to by the E		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreig</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority document</li> <li>application from the International Bureat</li> <li>* See the attached detailed Office action for a list</li> </ul>	nts have been received. Its have been received in Applicat Drity documents have been receive Tau (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1)   Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	, (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election without traverse of Group I, Claims 1-5 in the reply filed on 10/6/2006 is acknowledged.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (US Patent 7053125).

Lewis teaches comb polymers which are used as dispersant to increase the stability of colloidal suspensions containing multivalent or high concentrations of

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monovalent ions. The colloidal suspensions are also disclosed (Abstract). The suspension includes a carrier liquid which can include a variety of organic solvents such alcohols, DMF, DMSO, acetone, THF, glycerol or ethylene glycol (Column 5, lines 28-37). Particles that could be dispersed in the carrier fluid include metal particles such as copper (Column 5, line 61-63) and particle sizes can range from 1 nanometer to 100 microns (Column 9, lines 4-8). The comb polymer itself can have a backbone that includes "cationic polyelectrolytes" (Column 10, lines 3-6). Examples of these polyelectrolytes include poly(2-dimethylaminoethyl methacyrlate) (Column 10, line 49). The side chains of the comb polymer are formed from "capping agents" that include polyethylene oxide or polyethylene glycol (Column 11, lines 17-19). Lewis also suggests that such colloidal suspensions find widespread use in various applications including colloid based inks (Column 1, line 18).

### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Thomas Examiner 10/20/2006

JT

Mark Kopec Primary Examiner